

(2) Remarks

Dear Examiner,

In the Final Office Action dated 02/11/2004, pages 3 and 4 of Paragraph 6, a sample independent claim, modified from our Claim 1, that distinguishes patentability over the art of record is suggested. We have taken that suggestion, modified it slightly, and have drafted an amended Claim 1.

Similarly, we have drafted an amended Claim 7, based on the suggested modification.

We have added a new independent claim, Claim 13. This claim is based on the passages in the specification including page 8 lines 1-11 and lines 21-30, page 9 lines 1-5, and Figure 4A. In these passages and figure, details are disclosed about one particular embodiment of an ideal optical via having a coupling coefficient that diminishes at the input end and the output end of the optical via, in addition to a varying detuning between the effective indexes of the two waveguides. US 6,819,853 to Lam only shows a detuning at the input end (a tapering of the width of one waveguide), but does not show that the coupling strength diminishes (the two guides remain in close proximity at the input). Such a structure that Lam shows in his Figure 4(a) would lead to an abrupt step-wise “turning on” of the interaction at the input of the optical via. This abruptness leads to fundamental wavelength dependence of the optical via. US 6,724,968 to Lackritz does show a coupler where the coupling strength at the input end and output end diminishes. It is well known that his structure, a conventional directional coupler, is very wavelength and fabrication sensitive. We maintain that the fact that one needs both a variation of detuning, as well as a smoothly varying coupling strength that diminishes at the input and output of the via, in order to produce a wavelength and fabrication insensitive via, is non-obvious.

We have added new dependent claims, Claims 14-18. These claims are similar to Claims 2-6, but are dependent on new Claim 13.

With the amended claims, we now maintain that the amended claims in our response to the Final Office Action represent patentable novel structure over the cited prior art.

Conditional Request for Constructive Assistance

Applicant has amended the specification and claims of this application so that they are proper, definite and define novel structure which is also unobvious. If, for any reason this application is not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. section 2173.02 and section 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

Very Respectively,

A handwritten signature in cursive script that reads "Brent Little". The signature is written in black ink and is positioned above the printed name.

Brent E. Little

Applicant Pro Se